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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/561,286

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EXAMINER

GRANT, ALVIN J

ART UNIT

PAPER NUMBER

3723

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/561,286	Applicant(s) BOHNE ET AL.	
	Examiner ALVIN J. GRANT	Art Unit 3723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16, 19-21 and 24-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16, 19-21 and 24-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 13, 14, 15 and 21** are rejected under 35 U.S.C. 102(b) as being anticipated by Takahashi et al. 6,625,892.

Regarding claims 13 and 14, Takahashi et al. discloses an eccentric transmission, comprising: an imbalance compensation element **(11)**; an eccentric element **(8a,8b)**; at least one ball bearing **(7)** which is coupled to the eccentric element **(8a,8b)** an armature shaft **(3b)** having a rotation axis; an oscillating link **(105, 107)**; and a drive shaft **(3a)**, wherein a center of mass of a total system comprising the eccentric element **(8a,8b)** and the at least one ball bearing **(7)** lies on the rotation axis, wherein the eccentric element **(8a,8b)** has an armature recess receiving the armature shaft **(3b)**, is fixedly mounted on the armature shaft **(3b)** at the armature recess, converts in an operation mode a revolving rotary motion of the armature shaft **(3b)** into an oscillating rotary motion of the drive shaft **(21)** via the oscillating link **(14)** in order to drive an insertion tool **(B)** of a hand-held power tool **(Fig. 1)** to oscillate, wherein the imbalance compensation element **(11)** is a one- piece part of additional functional unit **(3)**, wherein an axis of the outer casing is inherently tilted in relation to at least one axis of the eccentric element; and the wherein the additional functional unit is the armature shaft

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(3b) of an electric motor (3).

Regarding claim 21, Takahashi et al. discloses an eccentric transmission, comprising: an imbalance compensation element (11); a ball bearing (12); an eccentric element (8a,8b) coupled to the ball bearing (12); an armature shaft (3b) having a rotation axis; an oscillating link (14); and a drive shaft (3a), wherein a center of mass of a total system comprising the eccentric element (8a,8b) and the ball bearing (12) lies on the rotation axis, wherein the eccentric element (8a,8b) has an armature recess receiving the armature shaft (3b), is rotatably and fixedly mounted on the armature shaft (3b) at the armature recess, rotates with the armature shaft and converts, due to its own rotation during an operation mode, a revolving rotary motion of the armature shaft into an oscillating rotary motion of the drive shaft (21) via the oscillating link (14) in order to drive an insertion tool (B) of a hand-held power tool (Fig. 1) to oscillate, wherein the imbalance compensation element (11) is a one-piece part of an additional functional unit (3), wherein the oscillating link (14) is fork-shaped, rests against both sides of an outer circumference of the ball bearing (12) and is non-rotatably connected to the drive shaft (21).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-4, 6-8 and 21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al. in view of Meyer 5,134,777.

Takahashi et al. is described above. Takashi does not specifically disclose the eccentric element is contained in the imbalance compensation element. Meyer discloses an eccentric transmission in which the eccentric element is contained in the imbalance compensation element so as to facilitate the adjustment of the degree of eccentricity of the tool. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have installed the eccentric element of Takahashi et al. in the imbalance compensation element as taught by Meyer so as to facilitate the adjustment of the degree of eccentricity of the tool.

5. **Claims 1-8, 12, 13, 19-21, 26 and 27** are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer.

Referring to claims Meyer 1-4, 6-8, 12, 13, 21 and 27, discloses an eccentric transmission, comprising: an imbalance compensation element **(32b)**; an eccentric element **(38)**; at least one ball bearing which is coupled to the eccentric element **(34)** an armature shaft **(20)** having a rotation axis; an oscillating link **(5:29-33)**; and a drive shaft **(36)**, wherein a center of mass of a total system comprising the eccentric element **(38)** and the at least one ball bearing **(34)** lies on the rotation axis; the additional functional unit **(38)** is the eccentric element; the imbalance compensation element **(32b)** includes a recess **(32a)**; the imbalance compensation element is composed of an outer casing of the eccentric element **(Fig. 2)**; a cross-section of the compensation element can change the can change the axial direction; the imbalance compensation element has at least

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two axially offset regions **(38/40)**; and the drive shaft is supported by a bearing. Meyer does not specifically disclose the armature being specifically disclose the armature shaft being connected to eccentric element. The location of the armature is a matter of obvious design choice since all the other elements are present. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have installed the armature and the eccentric element on the same shaft, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Referring to claim 5, Meyer does not specifically disclose an axis of the outer casing being tilted in relation to at least one axis of the eccentric element. The orientation of the axes casing and the eccentric element is a matter of engineering expedient and may be determined through routine experimentation with expected results.

Referring to claim 19, Meyer does not specifically disclose the eccentric element having as an opening for letting air escape from the recess. The installation of an opening in the eccentric element for letting air escape from the recess is a matter of engineering expedient and may be determined through routine experimentation.

Referring to claim 26, Meyer does not specifically disclose a fork-shaped oscillating link. The shape of the link is a matter design choice and is based on the purpose to be served thereby. It would have been an obvious matter of design choice to make the different portions of the oscillating link of whatever form or shape was desired or expedient. A change in form or shape is generally recognized as being within the level

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of ordinary skill in the art, absent any showing of unexpected results. *In re Dailey et al.*, 149 USPQ 47.

Claims 24 and 25, are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer in view of Takahashi et al.

Meyer and Takahashi et al. are described above. Meyer et al does not specifically disclose that the armature and the drive shaft are arranged perpendicular to each other or the armature shaft and the oscillating link are parallel to each other in at least one operation mode of the eccentric transmission. Takahashi et al. teaches that the armature and the drive shaft are arranged perpendicular to each other or the armature shaft and the oscillating link are parallel to each other in at least one operation mode of the eccentric transmission so as to optimize the efficiency of the tool. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made Meyer's apparatus to have the armature and the drive shaft are arranged perpendicular to each other or the armature shaft and the oscillating link are parallel to each other in at least one operation mode of the eccentric transmission as taught by Takahashi et al. so as to optimize the efficiency of the tool.

Response to Arguments

6. Applicant's arguments with respect to claims 1-16, 19-21 and 24-27 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALVIN J. GRANT whose telephone number is (571)272-4484. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph J. Hail can be reached on (571) 272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alvin J Grant/
Examiner, Art Unit 3723